NOTES ON TWO RARE ALGÆ OF VINEYARD SOUND.

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The following notes are offered in a somewhat extended form, in the hope that by calling attention to these species their known range may be considerably enlarged.

Giraudia sphacelarioides, Derb. and Sol., has been so confidently sought on our coasts that Dr. Farlow, twenty years ago, in the Marine Algæ of New England (p. 75), gave a brief description of it. Yet no one seems to have discovered it until I found a well-grown, but sterile, specimen at Vineyard Haven, in August, 1892. Nothing more was seen of it until fruited forms were collected at Cottage City in January, 1895. It then occurred sparingly on *Zostera*, intermingled with *Punctaria*, *Ectocarpus*, and various small species. It is easily overlooked, as it is but 5 to 10 mm. high, and usually only a few filaments are found together. It may readily be recognized by having a thallus which is polysiphonous above and monosiphonous below. A figure, copied from Hauck, is to be found in Bennett and Murray's Cryptogamic Botany, p. 238. As this is a common Mediterranean species, it should be sought late in autumn in Long Island Sound and in Rhode Island waters.

Pogotrichum filiforme, Reinke. This small alga was a most surprising find in our waters. It was before only known to occur rarely at Helgoland, where it was collected by Reinbold. It is described and figured by Reinke in his Atlas Deutscher Meeres-Algen, p. 62, pl. 41, figs. 13–25. In January, 1895, three fertile and unmistakable specimens, bearing unilocular sporangia, were found at Cottage City. It was then growing on *Zostera*, in company with *Desmotrichum*, *Giraudia*, and various small species. The specimens distributed in Hauck & Richter, Phycotheca Universalis, No. 470, are about 40 mm. high; our forms are dwarfed to one tenth that size, but otherwise correspond closely with the type. The plant consists of several fine filaments (arising from a thin substratum), which are composed usually of a single series of quadrate cells, .015–.030 mm. wide. Occasionally these may be divided, so that for a short space two or more series may be found side by side. The European specimens are olive-brown, but ours are almost hyaline, except for a space along the center of the filaments, where the darker spores are borne singly in superficial cells which surround the underlying thallus so closely that

it is entirely hidden. The plurilocular sporangia may be recognized by their resemblance to those of *Ectocarpus*. The identification of our specimens is due to the courtesy of Professor Farlow.

Since these notes were in type another very small specimen of *Pogotrichum filiforme* has been discovered, which shows that this interesting form still persists in New England. It occurred now upon *Sertularia pumila*, Linnè, among *Sphacelaria*, upon a bit of *Ascophyllum* which also harbored *Clava leptostyla*, Ag., a hydroid which is rather common on the *Fucaceæ* at low water mark on exposed shores. I am informed by Mr. G. W. Gray, Curator of the Marine Biological Laboratory, that the specimen in question was collected at Woods Hole about the end of last October. Since Vineyard Sound is a waterway used by many foreign vessels, it is not improbable that this plant is merely a waif from alien waters. Possibly future collections may cast light upon this interesting question.

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PLANTS FROM THE DUCK ISLANDS, MAINE.

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The Duck Islands, two in number, and small in area, lie seaward about ten miles off the coast from Southwest Harbor, Mt. Desert Island, Maine. The smaller island, Little Duck, is high, poorly wooded, partly cleared, and uninhabited. From a botanical point of view it is little explored. The larger island, Great Duck, is divided by a marshy depression from north to south, and is mostly cleared, but has some old woods still remaining. It is now the site of a lighthouse, and therefore inhabited by others besides the fishermen who often make temporary summer homes on both islands. Before the lighthouse was built, however, it had been long inhabited, until fire destroyed the farmhouse and forced the settler to make a home elsewhere. Sheep now graze over a large part of this island, and, as usual, make collecting most unsatisfactory to a botanist.

Some years ago, the late John H. Redfield, while engaged in work on the flora of Mt. Desert, considered the plants of these small outlying islands of sufficient interest to warrant the compilation of a list, as he from time to time observed them. Two lists were published by him in the Bulletin of the Torrey Botanical Club, xii : 103